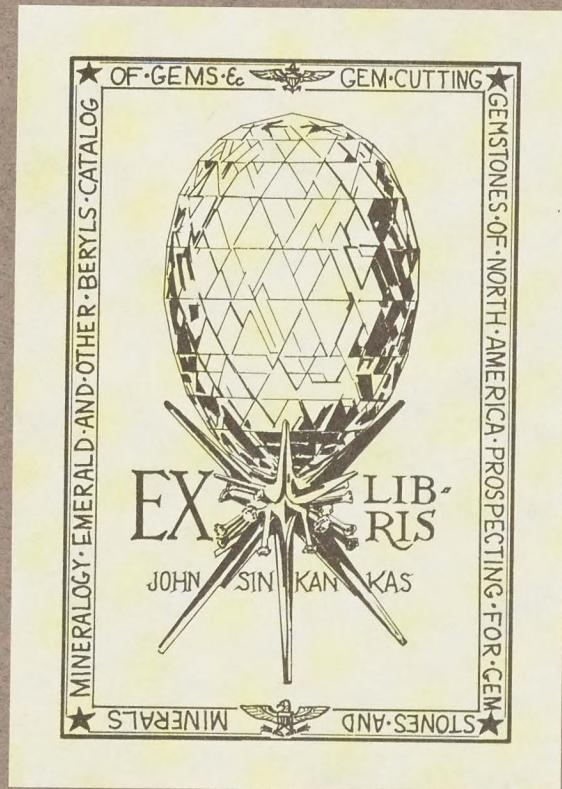


Queensland Gems

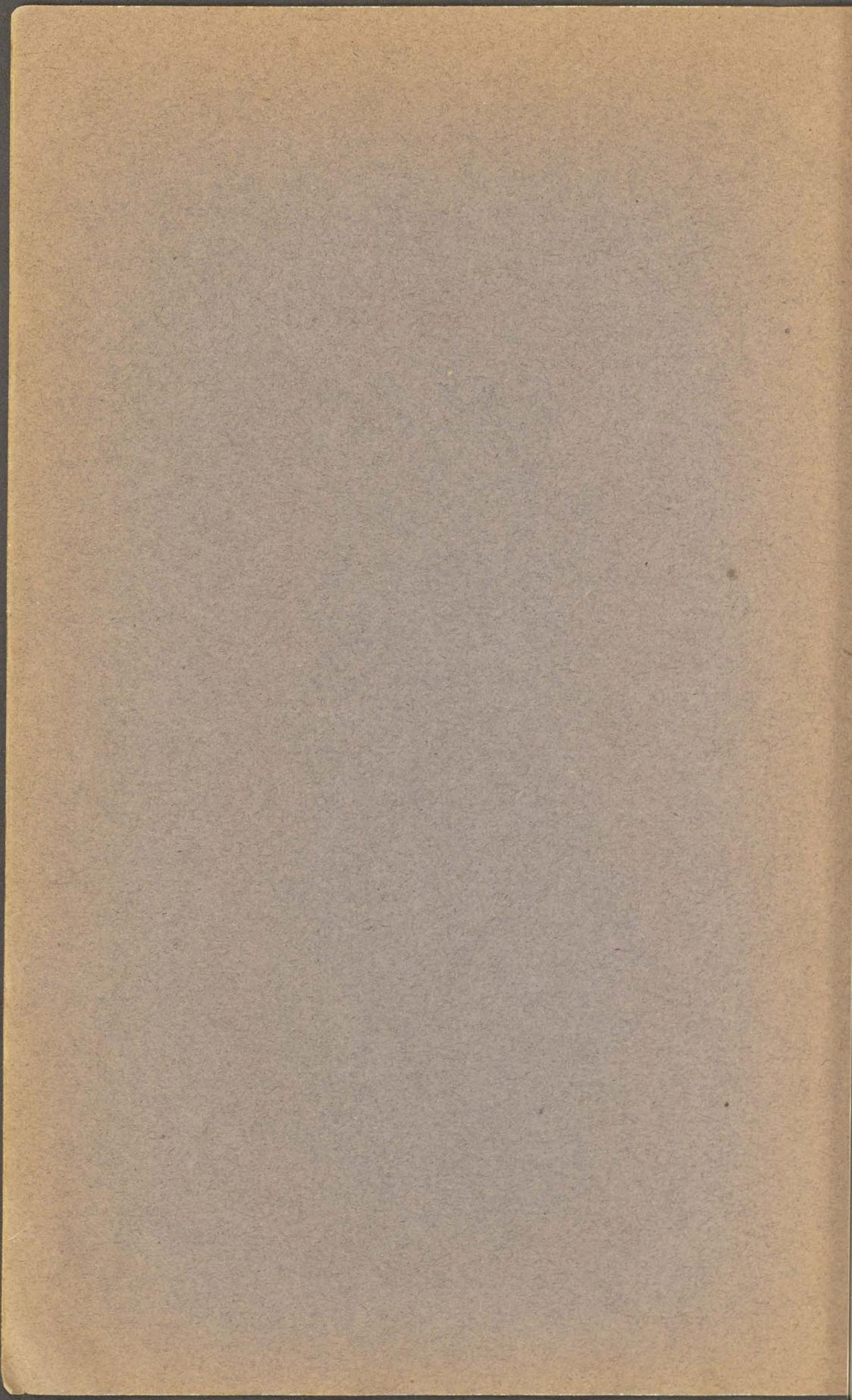
---

Lala Fisher.

5<sup>00</sup> 7/75  
Block, Denver







# Queensland Gems

(Reprint from "Steele Rudd's Magazine.")

BY

LALA FISHER.

Brisbane :

POWELL & CO., PRINTERS, LIMITED, ADELAIDE STREET.

1906.



## Queensland Gems.

BY LALA FISHER.

QUEENSLAND possesses a greater variety of gems than any other country in the world. Africa yields diamonds in abundance; India produces diamonds, sapphires, emeralds, moonstones and pearls; Burma is famed for her magnificent rubies; Siberia furnishes beautiful garnets; Siam is noted for its sapphires and spinels; Scotland for its cairngorm and Scotch pebbles, which are agates; Persia is rich in turquoise, which is the monopoly of the Shah, who derives from it an immense annual revenue; Italy affords the lapis lazuli, but Queensland possesses all these gems, and many others besides.

Precious stones were first discovered in Queensland by Mr. Archibald John Richardson, who, in the course of a surveying trip, came across them in 1873 at Anakie. Some years later, in 1880, sapphires were exhibited to the well-known firm of Messrs. Flavelle, Roberts, & Sankey by a well-sinker, who stated he had found them while putting down a well within ten miles of Brisbane. The gems were green, blue, and parti-coloured, about a carat each in weight.

Mr. Richardson eventually leased the ground whereon he had found the sapphires, and held it un-worked until 1890, when he entered into partnership with Mr. F. G. Fisher, and erected a complete plant for treating the valuable wash. In 1892 the Under Secretary for Mines sent the Government Geologist (Mr. R. L. Jack) to report on the field, and the following extract is taken from Mr. Jack's official communication:—

“ While I was on the spot two small loads of washdirt, weighing, as I judged, about a ton and a-half in all, were taken from among the boulders at the lower workings, and carted to the sorting trough. The result was 258 sapphires of from 3 to 179 carats each, and weighing in all 3289 carats; and 25 zircons of from 3 to 64 carats, and weighing in all 257 carats. The sluicing of the finer material beneath the trough yielded many thousands of smaller sapphires and zircons, pleonaste, white topazes, magnetite, haematite, and scales of gold. I saw in the possession of the manager one water-worn sapphire weighing 7 ozs. The sapphires are, for the most part, more or less abraded or water-worn and often fractured. I hazard a guess that among the larger stones, perhaps one in a hundred may be fit for some use in jewellery, while perhaps one in two thousand may be a sapphire, Oriental emerald, or Oriental topaz of the first water. A few cut stones in the possession of Mr. Richardson appear to be equal in value to some of the finest gems in the great mineralogical cabinets of Europe. Some of the zircons could be cut into stones which would be difficult to distinguish from rubies, except by their higher specific gravity, and by their hardness. Very fine large cut hyacinths, not professing to be either rubies or diamonds, have been sold for about £2 16s. per carat.”

Mr. Jack expressed the opinion that as no diamonds had then been found associated with the sapphires, as in other parts of the world, the diamonds and sapphires have been

derived from distinct sources, though within the same drainage area. That this view was a mistaken one has been proved since by the finding of several diamonds.

The first Australian ruby was discovered in the Macdonald Ranges, and a controversy was carried on for a considerable time by the Professors of English and Australian Universities as to whether it was a true ruby or a garnet. It was a red ruby, consequently faulty in colour, as the true ruby is of pigeon-blood hue. Towards the end of 1892 the first Queensland ruby was discovered on the Anakie gemfields. The finding of such a stone added vastly to the importance of the gem districts of Central Queensland, and opened out new possibilities for all interested. The Withersfield ruby was a hexagonal crystal, weighing fifteen carats. It was somewhat flawed, and had a decided blue tint in one corner, but furnished a gem of very fine color weighing about four carats.

Associated with the gem industry from its infancy, Messrs. Flavelle, Roberts and Sankey have been brought into touch with practically every gem of value ever found in the State. For them the endeavour to place Queensland gems on the world's market has been a very costly speculation. They had for very many years been purchasing parcels of stones, and the managing Director, Mr. James R. Sankey, was in the habit of visiting the fields, and sending gems in lots to London for sale, but in 1899, impressed with the extraordinary value of Queensland's gem asset, Mr. Sankey conceived the idea of advertising the gems by exhibiting them, and jewellery made from them, in the Earl's Court Exhibition, London. The whole State was thereupon ransacked for gems and interesting gem curios, and eventually a collection, amounting in value to many thousands of pounds, was sent to

England in the care of Mr. Charles Sankey Fraser, who remained in charge of the exhibit during the six months the Earl's Court Exhibition lasted. This venture cost the firm £2000, but their effort was an entire success. It is as well to refer here to the fact that in 1892 Mr. F. G. Fisher took to England a tray of perfect flawless sapphires of all colours and sizes. It was the intention of the partners (Richardson and Fisher) to float a company in London on the strength of the rare beauty of the jewels. To test the market Mr. Fisher visited a well-known diamond merchant in Hatton Garden, and displayed to him a blue sapphire and a green one. For the first he was offered and accepted the sum of £52, and for the green gem he received £54. Elated at his success he returned the following day with a very numerous assortment of beautiful stones, to find that the very quantity of the treasure frightened the merchant. All that he could do was, after this, useless. The ring which controls the supply of all gems, determinedly kept the Queensland jewels out, and a few shillings were offered for what had, but a day or two before, been considered a bargain at half a hundred pounds. Thus the daring experiment of Messrs. Flavelle, Roberts and Sankey may be looked upon as a double success. The great gem merchants feared a flooding of the market by the newly-won jewels, and even to this day are opposing them in every possible way. English people, however, flocked to see the Earl's Court exhibit, and the very keenest interest was taken in everything shewn. Many stones were sold at very satisfactory prices, and but few of the curios found their way back to Australia.

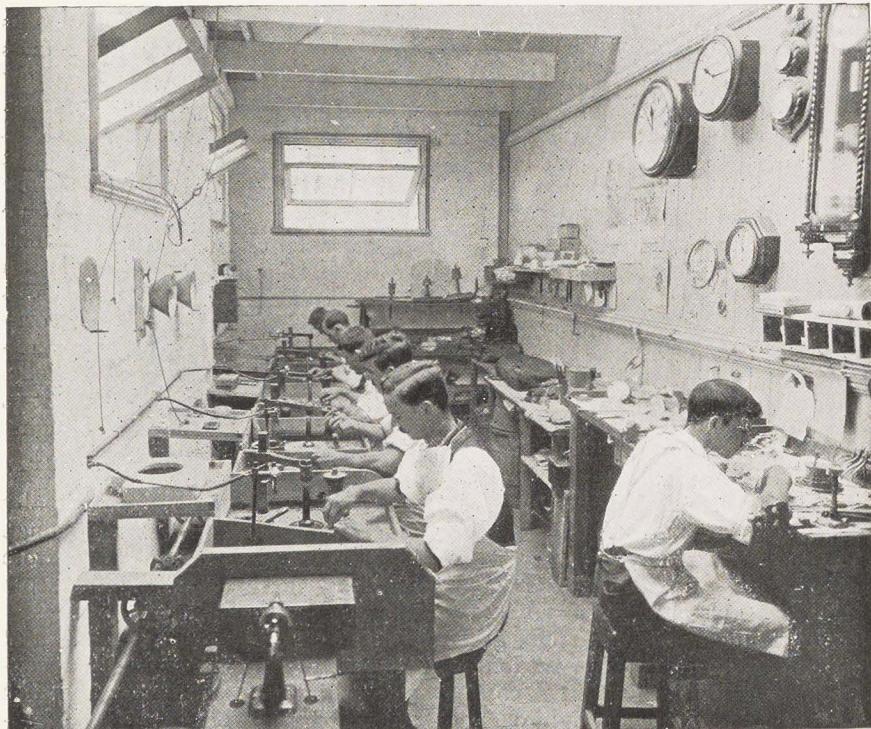
To make clear the extent to which the Queensland industry is carried, and the proportions into which it has developed, it is only

necessary to state that Messrs. Flavelle, Roberts and Sankey now employ a total of thirty-four hands upon the jewels alone. These include lapidaries, designers, gem-setters, jewellers, and tool-makers. The Queensland stones cut and polished in the workshops make a formidable list. They include diamonds, yellow sapphires, green sapphires, blue sapphires, rubies, garnets, olivines, white topaz, yellow topaz, jacinths, zircons, amethysts, opals, black opals, chrysophrase, beryl, turquoise, spinel, moonstone, agate, goldstone, cairngorm, aqua marine, the corundum catseye, the true chrysoberyl catseye, and petrified wood.

The diamond, the king of gems, is found in Queensland so far in very few places, chiefly owing to the lack of systematic search. Over thirty years ago Messrs. Flavelle, Roberts and Sankey paid £30 for a rough diamond discovered at

Stanthorpe, and ever since then the firm has been impressing upon the Stanthorpe people that diamonds are in their midst, and urging prospectors to seek for the precious pebbles. But evidently there is a want of enterprise about the townspeople, strange as it may be to understand. Subsequently other diamonds, perfect in shape and colour, were offered for inspection by Mr. Barton, M.L.A. These stones ranged from one to four carats in weight, and were all picked up in the bed of Quartpot Creek, a rivulet already rendered famous by the discovery there of tin. This district has been known as a rich gem-producing region for over thirty years, any child being able to gather sapphires, rubies, topazes, garnets, etc.

Diamonds have also been discovered on the Anakie gemfields. Mr. B. Dunstan, F.G.S., purchased there a one and a-quarter carat



LAPIDARIES' WORKSHOP, Messrs. FLAVELLE, ROBERTS, & SANKEY LTD., BRISBANE.

stone, an absolutely colourless crystal, which is now in the Geological Museum. It has been said that diamonds have been sold from the mines as white sapphires, but this is doubtful, the two stones being so entirely different. The diamond is peculiar in its greasy, vitreous appearance, while the sapphire is rougher and drier. The only white stone which approaches the diamond in appearance is the rough white zircon. As illustrating the casual manner in which great discoveries are sometimes made, it is interesting to remember that the Kimberley diamond mines owe their existence to a baby's fondness for marbles. A traveller, weary and hot, halted at a Dutch wayside farm for a drink. He expressed admiration for a large clear crystal with which a little child was playing, when the mother promptly presented him with it, remarking that the "Kleine kind" had a bagful with which to amuse itself. The traveller eventually sold the stone for £450, as it proved to be a diamond of the first water. Subsequently prospectors searched the country in the vicinity of the farmhouse, with the result that diamonds soon became the staple industry of South Africa. The largest diamond ever discovered was found in February of this year in the Premier Mine in Johannesburg. It has been christened the Cullinan Diamond, and weighs 3036 carats.

Sapphires exist in profusion at Anakie, Stanthorpe, Herberton, for a ten mile radius along the Johnstone River, Logan River, the Palmer River, and on the Darling Downs, where they were first discovered by Sir Augustus Gregory. The largest sapphire that has yet been found was a true green sapphire (an apparently paradoxical term), weighing thirty-five carats. It was a true sapphire and

not "schnide." It was taken fourteen years ago to Messrs. Flavelle, Roberts and Sankey for cutting, but owing to some difficulty with the lapidaries, the firm were unable to treat it. The finest sapphires cut in Queensland have been a green sapphire, flawless, brilliant, pure and perfect, of fifteen carats' weight; a blue flawless sapphire, over-dark, of fifteen carats; and a magnificent yellow sapphire of fully twenty carats. This gem had originally been cut in Melbourne, but while of absolutely perfect color—a golden yellow—it was devoid of life. Mr. Spier of Rockhampton, the owner, took it to Messrs. Flavelle, Roberts and Sankey for an expert opinion, and Mr. Sankey immediately decided that the stone was faultless, and that it had been ruined in the cutting. Mr. Spier instructed the firm to re-cut it, when a gem of wonderful beauty, reduced to fifteen carats, was the result. Mr. Spier afterwards refused £100 for this jewel. The largest uncut stones appear to have been a yellow sapphire, weighing forty-five carats, with superficial flaws which could have been removed by the lapidary; a green sapphire weighing, as before stated, thirty-five carats, and a blue gem weighing thirty-three carats. Of the selected gems, not more than one in twenty is of the precious true blue colour—that is, cornflower blue. Such a jewel is extremely valuable. Messrs. Flavelle, Roberts and Sankey exhibit but a few such choice specimens ranging from seven carats to half a carat.

Rubies are drawn principally from the Herberton district, though some fine samples have come from the Darling Downs, and a few from the Withersfield-Anakie fields.

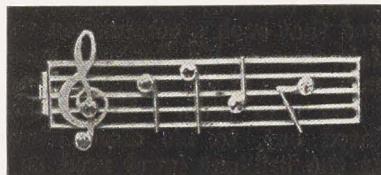
Many of the so-called rubies at Anakie are merely fractured sapphires, into the crevices of which iron has infiltrated, giving a beauti-

ful red hue to the stone. Sometimes this is carried so far that the blue sapphire and red ruby appear in alternate bands. Barklyite, one of the rarest of minerals, is the opaque, magenta-coloured ruby, and is not found anywhere in the world but in Australia at Stanthorpe and in the Ovens District (Victoria). It falls to the credit of Mr. Dunstan, F.G.S., Government Geologist, to have first recognised this stone in the Queensland Museum collection. [The value of the ruby cannot be fixed—it is sometimes more costly than the diamond. All depends on the color, size, and brilliancy. The rubies so far discovered have been insignificant in size, the largest ever cut being one carat in weight. They seldom exceed one and a-half carats in the rough.

Garnets are universally distributed all over Queensland. They abound throughout the Burnett watershed, Nanango, Herberton, Anakie, the Palmer River, Aramac, and other districts. They are found occasionally in the form of plum-pudding stone, the garnets representing the currants in a cement dough.

The Olivine is a rich, lustrous, grass-green stone, and by the uninitiated it is frequently mistaken for the emerald. Indeed, it is often palmed off on the trade as the emerald by unscrupulous gem merchants, not one jeweller in fifty being able to discriminate between them. The hardness is the surest test, and the color, for the Olivine is a golden green, distinct from the bluish green of the emerald. Being of strictly volcanic origin, the Olivine is found in a matrix of basalt on the Main Range near Harlaxton, between Toowoomba and Brisbane. Finds have also been reported in the Logan district, and probably Olivines are scattered through all areas where basalt exists, such as at the foot of volcanic

mountains. The Olivine in the rough state is a small, yellowish-green pebble with a rough surface. The deeper the colour in the rough the more valuable will be the



OLIVINE MUSIC BROOCH.  
Notes read D E A Rest.

gem. It is invariably a small stone, the largest being seldom more than three carats which cuts to one and a-half to one and three-quarters carats. Golden, grassy-green is the true color.

The Topaz is the most uniformly distributed gem in Queensland, even exceeding the garnet in abundance. One need have little hesitation in saying that it can be picked up in the bed of every creek in the state. It is found largely associated with tin crystals, and exists as small, round, white pebbles, which are water-worn crystals. Occasionally, but rarely, the true crystal is found. This may be mistaken for the quartz crystal, but it differs from it in the fact that it is a four-sided crystal with parallel planes. The quartz crystal is a six-sided crystal with six-sided pyramidal ends or heads. The rough topaz, when held to the light is pure, limpid, and cuts into a stone of equal brilliancy with the diamond. In fact, many so-called experts have, when the two have been placed before them, failed to distinguish one from the other. A gem dealer whose trade consists of purchasing diamonds from pawnbrokers and auctioneers, has been in the habit of having all his jewels tested by Messrs. Flavelle, Roberts, and Sankey, paying the ordinary valuation fees for the privilege. On

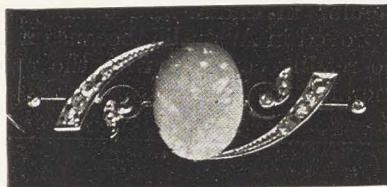
one occasion he brought in a large diamond which Mr. Sankey dismissed as rubbish. The dealer argued the point, when Mr. Sankey, to convince him, contrasted his diamond with one of the firm's brilliant stones. The buyer protested that such a comparison was unfair, because Mr. Sankey's specimen was one of the finest diamonds he had ever seen. Mr. Sankey pointed out, to his discomfiture, that the brilliant jewel used as a comparing medium was a Queensland topaz. The largest topaz yet cut was found at Mt. Perry by a fossicker. It is nearly two inches long and three-quarters of an inch in depth. It is flawed in one corner, and is the only stone Messrs. Flavelle and Sankey have ever allowed to go from their workshops with a flaw in it. It is valuable as a specimen of the size and brilliancy of such gems. It weighs  $110\frac{1}{2}$  carats, and bears nearly 300 facets. Its appearance is that of an arrested giant drop of living, liquid gold. Its value, on account of its blemish, is only £7 10s. The yellow topaz varies considerably in colour, ranging from palest straw-colour to the deepest golden-brown. There is a secret process by which the topaz can be artificially changed in color. This much is known, however, that the gem is first treated in honey for a lengthy period of time, subsequently in vinegar, and when the acid has acted upon the particles of saccharine the final effect is obtained by firing. Many exquisite pinks are thus obtained. The process is thoroughly understood in Germany and Switzerland.

Jacinths or hyacinths and zircons are very closely allied to each other, the jacinth being a paler and browner variety of zircon. The jacinth is still further classified in India as cinnamon stone and jar-goon. It is a rich brown, of all shades, working through warm browns almost into the reds, where-

as the zircon is a blood-red gem rivalling the ruby in the depth of its glorious hue. The Anakie hyacinths are peculiarly susceptible to light and heat, and have been known to change colour with the temperature of the human body. As with the topaz, gradual heating of the stone lightens the shade, but very often destroys the character of the colour, turning it from red to brown. Intense heat purges the gem to pure whiteness and occasionally heightens its brilliancy. Exposure to the sun also lightens the hue, but as a rule the original tint afterwards returns. A zircon artistically cut by a skilful lapidary possesses a heart of flame; it is literally ablaze in the centre.

The amethyst, which, by the ancients, was regarded as a cure for drunkenness, and was adopted ecclesiastically as the badge of the bishops, has, so far, been discovered in only a few districts in Queensland. It has been found at Stanthorpe, at Texas, on the border between Queensland and New South Wales, and here and there along the Main Range. It is not found anywhere in quantity. The amethyst is really a quartz crystal of purple colour, and has the same crystalline formation as the quartz crystal—that is, six-sided with pyramidal ends. The largest amethysts weigh over a pound in the rough, and look like a stone. They are discoverable only by their hardness and crystalline form. They are generally found on the banks and in the beds of creeks, also wherever gold-mining is in progress. They are frequently met with in drives, and the digger takes no notice of the purple crystals which he tramples under foot. If he did many beautiful specimens would find a way to the market. The finest amethysts in the world come from Siberia, and in value they range up to twenty times as much as the gems from Brazil,

which are of a paler variety. The best quality are, to some extent, iridescent, while the pale, washy specimens are valueless.



QUEENSLAND OPAL and DIAMOND BROOCH.

Thirty years ago, when Queensland opal was first discovered, all sorts of wild statements were made regarding it, and on the European market a statement was expressed that the Australian opal is "too young." This was merely an endeavour, by interested parties, to keep a strong antagonist off the field. At that time Hungarian opal was very popular. It was a milky stone with pinfire flashes, not in any way comparable with the lovely Queensland jewel. But in the course of a few years the merits of the latter overcame the strong and widespread prejudice which had been artificially kept alive in favour of the Hungarian gem, and the Queensland variety was admitted to be more beautiful and in every way more desirable. In a comparatively short space of time it completely commanded the market, and swept the Hungarian gem out of existence. The principal fields for opal in Queensland have been:—Opalton, eighty miles southwest of Longreach, Fermoy, also in the Longreach district, Duck Creek, thirty miles beyond Yowah; Yowah, thirty miles north-west of Eulo; and Rossiter's Lagoons. Opals are found practically throughout the whole western area of the State. Fermoy and Opalton have produced the best quality of ordinary opal, but the choicest green opal comes from Duck Creek. The Yowah

field is famous for its opal nuts or nodules, the opal being found inside a thick, stony husk in somewhat the same manner as the fruit of a cocoanut. The opal in this form is frequently shattered on discovery, as the miner's practice is to chop the nuts open with a tomahawk. The nuts are found sometimes above twelve inches in diameter and down to as small as a quarter of an inch in size. Practically they are all spherical in shape. Pinkilla, near Thargomindah, and Yerongalla stations in the same district have lately sent out some fine samples of opal.

A remarkable variety, which is found nowhere else in the world but in Queensland is the black opal. Messrs. Flavelle, Roberts and Sankey have paid special attention to the cutting and polishing of this extraordinary gem. It is impossible to describe the effect of the fire in such a sombre stone. The colours are as varied as a rainbow and a poetical woman once characterized these jewels as "petrified flame."

During the nineteenth century the Opal has been regarded as an unlucky stone. It is interesting from a literary point of view to trace the origin of this superstition, for no more powerful proof of the power of the pen has ever been adduced. The ancients esteemed the opal a lucky gem. In their cult of beauty they taught that the gods, naturally choosing the most lovely thing on earth to live in, took the opal for home. The jewel was consequently worn



BLACK OPAL and DIAMOND PENDANT.

as a talisman to ward off the evil eye. This affection for the stone continued up to the time when Sir Walter Scott wrote his novel "Anne of Geirstein" in which, as is well known, he attributed the misfortunes of the noble family wholly to the possession of an opal received from a Persian seer, the last of the bygone order of Rosacrucians—the secret order of the Rosy Cross—who were the antecedents of the present day Masonic fraternity. The civilized world accepted this British classic, and the superstition appears to have been adopted by all countries. The late Queen Victoria did her best to stem the abuse of this beautiful gem, and in a great measure succeeded, with the result that the opal is becoming popular for the first time since the publication of the above story.

In popular parlance many names are given to different varieties of opal, due entirely to peculiarities of the stone. It is described as "fire opal, pin-fire opal, broad flash, Harlequin, milky opal, noble opal, etc., but rarely two people agree as to which is which. The only true criterion as to the value of the stone is beauty.

The Chrysophrase, the emblem of good fortune, is a beautiful, apple-green gem found in the Logan and Marlborough districts. Wonderful specimens of chrysophrase come down past Yaamba in the river drift, the source of which has never yet been traced. Some of it is clear and tender green, and many specimens are olive green and cloudy. Wrought into ornaments and trinkets it would compete with the New Zealand stone, and would probably eventually become a substitute for it in all ways for which greenstone is now used. Like all other opaque stones, it is cut *en cabochon*—that is, rounded like a drop of tallow and quite distinct from the treatment of transparent

jewels, which are invariably cut with facets.

The Beryl has been found on the Macpherson Range. It resembles a very pale emerald, and is very popular in India. It is not yet approved in Australia, because it is too readily confused with the pale emerald.



CARVED MOONSTONE and DIAMOND BROOCH,

The Moonstone, which is, par excellence, India's stone of luck, is a translucent milky gem, having a curious moonlight effect. It abounds in the Nanango district, but the industry has never been developed to any appreciable extent, owing to the exceedingly low price at which Indian specimens can be obtained. Judging from samples of wash which have been tested at Nanango, some excellent samples must be procurable there. This stone is also always cut *en cabochon*.

The Turquoise, or true-love stone, has of late years been a widely popular gem, especially when associated with pearls, the signification of the combination being true-love and purity. The locality in which it exists in Queensland is chiefly about Pine Island and Keppel Bay, and again in the Logan District. The standard color for it is the blue of the egg of the English hedge sparrow. In Queensland it is obtained in the true blue tint and also in a very peculiar duck-egg green. The turquoise has been much in favour of late on the London market cut as matrix—that is, shewing portions of the mother-rock in streaks and patches through the pebble. Messrs. Flavelle, Roberts,

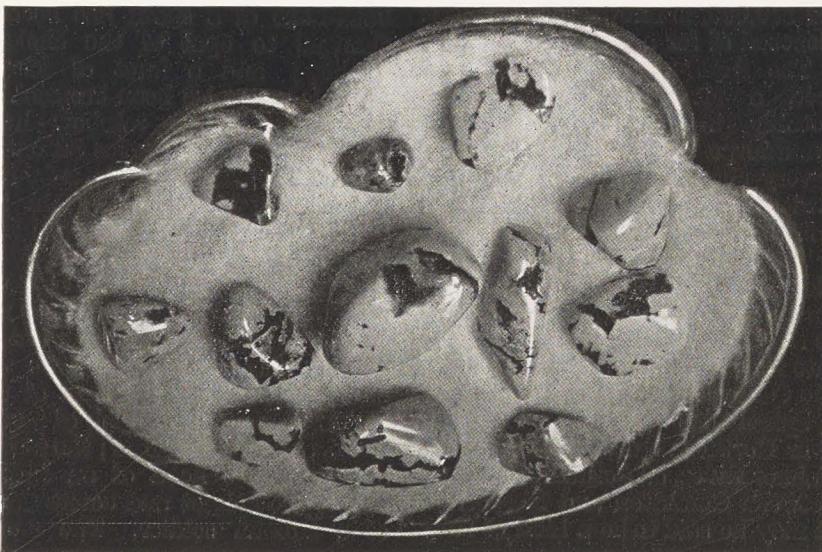
and Sankey possess a tray full of exquisite specimens, which were all discovered in the Keppel Bay region.

As disclosing how widely spread the Agate is throughout the State it is only needful to mention that there are between thirty and forty creeks in Queensland named Agate Creek, so called from the fact that agates have been found in their beds. Everywhere across the watershed of the Burnett River they are scattered in the most liberal profusion and in the most wonderful variety of markings and colorings. They graduate from deep red, through all the pinks and yellows down to pure milk-white, banded alternately with white and translucent bands. The agates of Percy River, in the Etheridge district, where there are vast areas of agate-bearing country, are specially handsome, and compare favorably with the finest foreign specimens. These semi-precious gems have, unfortunately, not much market value, owing to their frequent occurrence, and to the fact that huge deposits exist in Brazil, whence the European supplies are principally drawn.

Specimens of Gold-stone are very

often true auriferous quartz, loaded with gold in minute cubic crystals. This formation is sometimes met with on the Gympie field, and it is infinitely more beautiful than the Avanturine, which is the gold-stone of commerce, and which is really a peculiar glass, accidentally, as its name implies, manufactured during the experiments of a Spanish chemist. Another variety of gold-stone is the natural avanturine, a translucent stone of red and more rarely of green, with minute particles of mica disseminated through it.

Although not strictly gems, many lovely samples of petrified wood have come into the Queensland market as desirable jewels. Some of them shew wonderful effects in light and grain, and they are frequently tinted with mineral stains, such as nickel, iron, cobalt, etc, and these give rise to a multitude of varieties. Of course, it is only the very choicest specimens that come into the hands of the lapidary. Petrified wood is found everywhere, and it appears as if every class of wood is subject to petrifaction. While trenching land for grape vines a resident of Coorparoo came across some petrified wood of poor



TRAY OF QUEENSLAND TURQUOISE

coloring. From this he traced out a petrified tree thirty feet in length.

A remarkably handsome mineral has lately been unearthed at Warwick, and will, it is hoped, find a wide market for inlaid work and for trinkets. It is a sparkling rose-red manganese, occasionally veined with satiny-black manganese, and the effect when cut and polished is very uncommon.

The north-east coast of Queensland has long been famous for its pearls. While it is realized that almost fabulous wealth has been grasped, no one really knows what figures that value has reached, as the whole trade was for many years shrouded in secrecy. Magnificent individual fortunes have been realised, notably that of Mr. Jim Clark, the well-known "Pearl King," who is credited with the possession of some wonderful and unique specimens from these mysterious seas. The industry has assumed very large proportions, and has but lately been the cause of an untoward amount of Ministerial anxiety. Single pearls up to £800 in value have been fairly common, and one at least, resembling the Broome pearl, which was an aggregation of some hundreds of pearls and sold for £10,000, is known to have been disposed of for a very large sum.

The Aqua-marine is, to be correct, a bluish topaz. It exists notably in the Herberton and Stanthorpe districts, and cuts into a very charming stone, the deeper varieties almost approaching the pale blue sapphires in colour.

The Cairngorm, the Scottish emblem, is found in both the above territories. It may be defined as a smoky quartz-crystal, and cuts into the rich colors so famed among the Celtic race.

Spinel has been met with all over Northern Queensland; on the Palmer River, on Jordan Creek, and between Geraldton and Herberton. It may be said to be a kind of ruby

rather darker than the Burmese variety.

The Catseye or chrysoberyl has been discovered so far only on the Anakie gem fields. If more attention were paid to these pretty stones they would soon rival the far-famed catseyes of India.

Recently, Messrs. Flavelle, Roberts and Sankey received a sample of Lapis Lazuli from Watsonville, near Herberton, the first specimen yet seen in the State. Doubtless other pieces will soon be discovered. It is a blue stone, with golden clots through it, and it was indispensable during the Middle Ages for all Italian ornamentation. Some marvellous specimens are preserved in the Borgia collection in the Pitti Palace at Florence. It is the stone from which the celebrated ultra-marine tint is made, the waste particles of the gem being ground into the pigment. As indicating its value it may be mentioned that the market price of a single cake of the color in London is twenty-one shillings.

There are many freaks, as it were, among Queensland gems. The Asteria (the star-sapphire), for instance, rejoices in an opalescent crown of rays; a section of the back-bone of a shark has become changed to opal of the choicest quality; and a knot of felspar crystals have also been besprinkled with the lovely rainbow-hued substance. There is also an extraordinary combination of a ruby and a blue sapphire occurring in the one crystal. The two colours blend imperceptibly, so imperceptibly as to give the impression that the hues of the sapphire and ruby are not due to chemical substances, but to optical effects. Freaks there are also fashioned by the skill of the lapidary—cameos of opal, of moonstone, and of other gems; the face of an angel, the head of an Indian brave, the helmet and countenance of a Roman soldier. The moon-

stone is perhaps the most difficult to carve owing to some peculiarity in the grain of the stone.

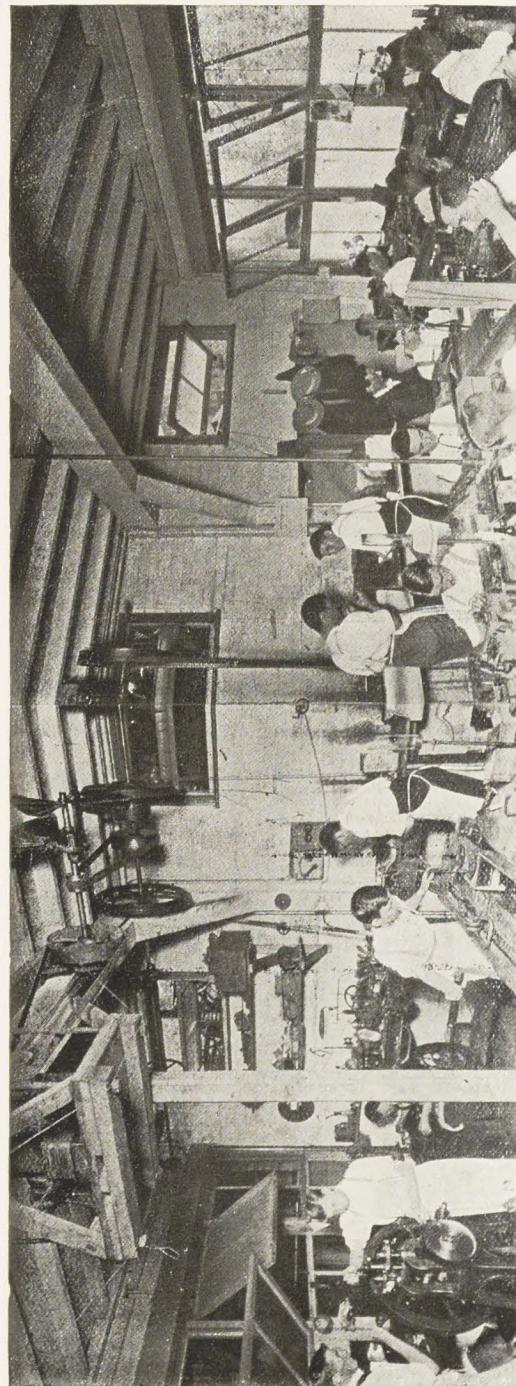
The gemstones that have not yet been discovered in Queensland are but three—the emerald, the tourmaline, and Alexandrite. The Emerald, though not yet met with in the State, has been discovered close to the southern border at Emmaville, New South Wales. The Tourmaline, which possesses the peculiar property of polarizing light, is a rich deep, chromium-green gem, some lovely specimens of which are being at present found in South Australia. Red varieties of the same stone are used as substitutes for rubies, and many of the jewellers' rubies are really pink tourmalines. The black opaque tourmaline is very commonly distributed throughout Queensland, but it has not yet been found in colour. Alexandrite is the valuable coloured chrysoberyl, which is dark-green by daylight, but is transformed into a gem of raspberry-red hue by artificial light.

The chief gem field of the industry in Queensland is undoubtedly Anakie. At the present time there is rather a disinclination amongst buyers to visit the field, as they are agreed that a very unfair system of competition has arisen, coming as it

does from Government officers. In addition to salaries, these men have travelling and living expenses paid, and on account of their peculiar station acquire the most intimate knowledge of what the miners are doing. They are consequently in an exceptionally favourable position for securing the best possible results of the field at the lowest possible rates, and are thus able to undersell the legitimate gem merchants, who are anxious to see the whole industry developed, knowing that their commercial prosperity in a great measure depends on the prosperity of the field. It is an open secret, both among the miners and among all gem dealers, that this trade is being carried on, but, of course, no man cares to take the onus of exposure on his own shoulders.

What its gems mean to Queensland has not yet been even dimly realized by the majority of people. It may be said that but for the enterprise of a few private individuals and the never-ceasing nursing of the industry by Messrs. Flavelle, Roberts and Sankey, Queensland jewels would have still remained playthings of light and beauty to do no more than to excite the wonder and awe of bushmen and the joy of station children.

*(All Rights Reserved.)*



JEWELLERY FACTORY, MESSRS. FLAVELLE, ROBERTS & SANKEY, LIMITED, BRISBANE.







